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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,449	10/27/2003	Jerome L. Elkind	TI-29069.1	2907
23494	7590	09/08/2004	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			VANORE, DAVID A	
			ART UNIT	PAPER NUMBER
			2881	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/693,449

Applicant(s)

ELKIND ET AL.

Examiner

David A Vanore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Applicant's arguments filed August 11, 2004 have been fully considered but they are not persuasive.

The applicant has argued regarding claim 1 that Leland et al. fails to teach or suggest a device having a fluid path having one or more fluidic conduits and an analyte detection chamber disposed along the fluid path having at least one interior surface adapted for derivatization.

Applicant has further defined the term "derivatize" as "to alter the chemical composition [of a compound] by a chemical reaction which changes some part of the molecule leaving most of the molecule unchanged."

Leland et al. teaches, as pointed out in the previous office action, working electrodes (56/58) on which a plurality of particles are caused to be deposited (Col. 8 lines 28-41). After the deposition, the particles are washed and a binding assay introduced to the chamber such that electrochemical luminescence is measured as the introduced compound interacts with the particles bound to the working electrode. Since the introduced compound chemically binds to the deposited particles and are later washed or released such that a new compound may be tested, it is clear that the working electrode surface is adapted for derivatization where the adaptation comprises as least the deposition of particles for the selective binding of an introduced compound for analysis. (Note further Col. 6, 9-11, and 21).

The remarks directed towards claims 2-7 rely on the arguments presented against claim 1. Since applicant's arguments regarding claim 1 have not been found persuasive, claims 2-7 stand rejected.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-4 and 6 stand rejected under 35 U.S.C. 102(e) as being clearly anticipated by Leland et al.

Leland et al. teaches a flow cell for directed molecular interaction as depicted in Fig. 23 comprising fluid path such that an analyte to be analyzed by surface plasmon resonance are directed across a directed molecular interaction

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bias generator comprising working electrodes (56/58) directly opposite a window and above electromagnet (27/37) such that a desired analyte may be selectively manipulated for analysis (Col. 21 Line 46-Col. 22 Line 8, and Col. 6 line 49-Col. 7 Line 26). Leland further teaches that the surface of the electrodes 56/58 are used as detection means (Col. 15 Lines 36-43) and that a photomultiplier tube may be used to detect light excited during surface plasmon resonance (Col. 22 Lines 1-9) as recited in claims 1-4 and 6.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 7 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Leland et al. as applied to claims 1-4 and 6 above, and further in view of Gorgone et al.

With regards to claims 1-4 and 6, the contents of Leland et al. pertaining to that recited in the claims are laid out above.

Leland et al. fails to disclose a flow cell as recited in claims 4 or 6 where the flow cell further comprises a thermistor.

Gorgone et al. contains the teaching of a flow cell having a temperature controlling means and a thermistor temperature detection means (Items 75 and 79 respectively as discussed at Col. 2 of Gorgone et al.).

One would have been motivated to combine the device of Leland et al. with the device Gorgone et al. to produce a flow cell having the molecular interaction bias generating flow cell recited in Leland et al. as in claims 4 and 6 which further adjusts and monitors the temperature of the fluid under analysis in the flow cell with precision.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Gorgone et al. into the bias generating flow cell of Leland et al. because Gorgone et al. teaches that there is a need to precisely regulate and monitor the temperature of test samples (Col. 1 Lines 25-34 and Col. 2 Lines 5-10, 20-45, and 68-75).

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A Vanore whose telephone number is (571) 272-2483. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on (571) 272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dav



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